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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,530	12/10/2003	Wenzheng He	HUANG02	9053

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J C PATENTS, INC.
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EXAMINER	
LEPISTO, RYAN A	
ART UNIT	PAPER NUMBER
2883	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,530	HE, WENZHENG	
	Examiner	Art Unit	
	Ryan Lepisto	2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 72' and 73'.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(f) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. The disclosure is objected to because of the following informalities: Please amend to include the office's preferred titles as described above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1-6, 9-14 and 17-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of **Voskoboinik et al (US 5,485,355)** (Voskoboinik) and **Feldman et al (US 5,753,381)** (Feldman).

Voskoboinik teaches an electroluminescent light source (Figs. 3-5) comprising a metal conductive wire (2) (either 0.1-0.3 mm or 0.5-3.0 mm thick) as a core wire, a medium insulating layer (6) coated on the core wire (2), a light emitting layer (8) coated on the medium insulating layer (6), a second electrode (4) as a transparent conductive layer (1.0 μm thick) in Fig. 5 and as conductive wound wires (Figs. 3-4) (0.1-0.3 mm thick) that are lead out to a source, a transparent polymer casing tube (10) disposed on the second electrode (layer and wires) giving an overall filament diameter of about 1.5-5.0 mm.

Voskoboinik does not teach expressly a polymer casing tube, 0.5-3.0 mm thick, with a helical or sectional color pattern of at least 2 to 8 colors disposed on the transparent polymer casing tube.

Feldman teaches an electroluminescent filament with (in order from the center out) a central conductor (101), insulating layer (102), light emitting layer (104) conductive wires (105) and a insulating layer (106) and wherein an additional layer of transparent or translucent colored material layer may surround the structure given in striped (helical and therefore sectional since every striped or helical section will be a section of color) configuration that alters the spectrum of emitted light (giving more than one color) that would be recognized by one of ordinary skill in the art (column 7 lines 6-21).

Voskoboinik and Feldman are analogous art because they are from the same field of endeavor, electroluminescent filaments.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use both teaches of conductive wire and layer taught by Voskoboinik and the outer casing tube taught by Feldman since both teach similar filament structures. Also, both Voskoboinik teach insulating layers in the 0.5 to a couple of millimeter range so this range of the optional layer taught by Feldman would be obvious.

In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

The motivation for doing so would have been to increase the filaments ascetics and functionality by altering the spectrum of emitted light (Feldman, column 7 lines 8-9).

4. **Claims 7 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Voskoboinik and Feldman as applied to claims 1-3, 5-6, 9, 11, 13-14 and 17 above, and further in view of **Baumberg et al (US 5,869,930)** (Baumberg).

Voskoboinik and Feldman teach the electroluminescent filament described above.

Voskoboinik and Feldman do not teach expressly the medium insulating layer having the properties in claims 7 and 15.

Baumberg teaches an electroluminescent filament (Fig. 1-2) with a similar multi-layered structure as Voskoboinik and Feldman comprising a flexible copper conductive wire serving as an electrode (2) covered by a medium insulating layer (4) consisting of $BaTiO_3$ powder in a flexible binder on a cyanoethyl base (thickness 10-15 μm) surrounded by a light emitting layer (6) made of a cyanoethyl base surrounded by a transparent electrode layer (8) made of gold (Au) (thickness 200-400 x 10^{-10} m, which is less than 0.05 mm), copper wire electrode (14) wound on the conductive layer (8) as an additional second electrode and a flexible polymer layer (12) surrounding all the previous layers (column 2 lines 46-63 and column 3 lines 5-8).

Baumberg also does not teach the insulating layer (4) being 25-60 μm thick, but instead 10-15 μm. At the time the invention was made, it would obvious to a person of ordinary skill in the art to use an insulating layer of 25-60 μm thickness. Applicant has not disclosed that a 25-60 μm thickness provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a 10-15 μm because provides a sufficient dielectric layer.

Voskoboinik, Feldman and Baumberg are analogous art because they are from the same field of endeavor, electroluminescent filaments.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the material as taught by Baumberg in place of the material as taught by Voskoboinik and Feldman since the source specifications are similar for both.

In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

The motivation for doing so would have been to increase efficiency by using a filament with increased electrical capacity and a brighter light (Baumberg, column 1lines 33-38) and reduce the size and weight by using a thinner insulating layer.

5. **Claims 8 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Voskoboinik, Feldman and Baumberg as applied to claims 1-3, 5-7, 9, 11, 13-15 and 17 above, and further in view of **Toguchi et al (US 6,329,083 B1)** (Toguchi).

Voskoboinik, Feldman and Baumberg teach the electroluminescent filament described above.

The combination of Voskoboinik, Feldman and Baumberg does not teach expressly the light-emitting layer being a mixture coat having phosphorus powder with a thickness of 25-60 μm. The combination of Voskoboinik and Baumberg does teach the light-emitting layer (6) being 30-100 μm (Baumberg, column 2 lines 54-55), but in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Toguchi teaches an electroluminescent compound comprising phosphorus (column 38 line 65) that can also contain a cyanoethyl group (column 14 line 29).

Voskoboinik, Feldman, Baumberg and Toguchi are analogous art because they are from the same field of endeavor, electroluminescent devices.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the compound as taught by Toguchi in replace of the light-emitting layer as taught by Baumberg and still have a reasonable expectation for success in the system since only a phosphor is being added.

The motivation for doing so would have been to increase efficiency by having organic electroluminescent device having improved light-mission characteristic (Toguchi, column 1 lines 6-9).

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. **Claims 1-18** of this application conflict with claims 1, 4-7, 9-15, 18-19 and 21-23 of Application No. 10/769,306. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such

claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Note this rejection will become a statutory type double patenting rejection as soon as the allowed application 10/769,306 gets assigned a patent number and is published.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RSL

Frank G Font

Ryan Lepisto

Art Unit 2883

Date: 7/25/05

Frank Font

Supervisory Patent Examiner

Technology Center 2800